

Title (en)

METHOD OF ISOLATION OF PURE CULTURE OF VASCULAR ENDOTHELIAL CELLS, MEDIUM FOR MAINTAINING CHARACTERISTICS OF VASCULAR ENDOTHELIAL CELLS, AND CULTURE METHOD INCLUDING SAME

Title (de)

ISOLIERUNGSVERFAHREN EINER REINEN KULTUR VON VASKULÄREN ENDOTHELZELLEN, MEDIUM ZUM ERHALTEN DER EIGENSCHAFTEN VON VASKULÄREN ENDOTHELZELLEN UND KULTURVERFAHREN DAMIT

Title (fr)

PROCÉDÉ D'ISOLEMENT DE CULTURE PURE DE CELLULES ENDOTHÉLIALES VASCULAIRES, MILIEU DE MAINTIEN DES CARACTÉRISTIQUES DE CELLULES ENDOTHÉLIALES VASCULAIRES, ET PROCÉDÉ DE CULTURE LE COMPRENANT

Publication

EP 4060024 A4 20231206 (EN)

Application

EP 20887246 A 20201111

Priority

- KR 20190145348 A 20191113
- KR 20190145337 A 20191113
- KR 2020015785 W 20201111

Abstract (en)

[origin: EP4060024A1] The present specification provides: a method of isolation of a pure culture of vascular endothelial cells, the method capable of isolating homogeneous endothelial cells adhered to a matrix for a specific time in a cell line of an endothelial cell lineage differentiated from human pluripotent stem cells; a medium for maintaining characteristics of vascular endothelial cells, comprising high-purity vascular endothelial cells isolated through the method, 4 ng/ml to 6 ng/ml of FGF2, 5 ng/ml to 10 ng/ml of EGF, 10 ng/ml to 30 ng/ml of VEGF-A, 20 ng/ml to 50 ng/ml of ascorbic acid, and DMEM/F-12 as active ingredients; and a culture method comprising same.

IPC 8 full level

C12N 5/071 (2010.01); **A61K 35/44** (2015.01); **A61P 9/00** (2006.01)

CPC (source: EP US)

A61K 35/44 (2013.01 - EP US); **A61P 9/00** (2018.01 - EP); **C12N 5/0607** (2013.01 - US); **C12N 5/069** (2013.01 - EP); **C12N 2500/38** (2013.01 - EP); **C12N 2501/11** (2013.01 - EP US); **C12N 2501/115** (2013.01 - EP US); **C12N 2501/165** (2013.01 - EP US); **C12N 2506/03** (2013.01 - US); **C12N 2533/54** (2013.01 - EP)

Citation (search report)

- [X] EP 2718425 A1 20140416 - HOFFMANN LA ROCHE [CH]
- [X] US 2003194802 A1 20031016 - ITSKOVITZ-ELDOR JOSEPH [IL], et al
- [X] WO 2017200486 A1 20171123 - AGENCY SCIENCE TECH & RES [SG]
- [I] AJA HARDING ET AL: "Highly Efficient Differentiation of Endothelial Cells from Pluripotent Stem Cells Requires the MAPK and the PI3K Pathways", STEM CELLS, vol. 35, no. 4, 1 March 2017 (2017-03-01), pages 909 - 919, XP055572466, ISSN: 1066-5099, DOI: 10.1002/stem.2577
- [XAI] XIAOJUN LIAN ET AL: "Efficient Differentiation of Human Pluripotent Stem Cells to Endothelial Progenitors via Small-Molecule Activation of WNT Signaling", STEM CELL REPORTS, vol. 3, no. 5, 1 November 2014 (2014-11-01), United States, pages 804 - 816, XP055246300, ISSN: 2213-6711, DOI: 10.1016/j.stemcr.2014.09.005
- See also references of WO 2021096218A1

Designated contracting state (EPC)

AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)

EP 4060024 A1 20220921; **EP 4060024 A4 20231206**; AU 2020382287 A1 20220602; CA 3156948 A1 20210520; CN 114746543 A 20220712; JP 202301419 A 20230118; JP 7479466 B2 20240508; US 2022378845 A1 20221201; WO 2021096218 A1 20210520

DOCDB simple family (application)

EP 20887246 A 20201111; AU 2020382287 A 20201111; CA 3156948 A 20201111; CN 202080078760 A 20201111; JP 2022526288 A 20201111; KR 2020015785 W 20201111; US 202017775767 A 20201111